

## SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800

Rev. 3/15/2004 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 272-2511.

Date <u>12/16/05</u>	Serial # <u>10/801475</u>	Priority Application Date <u>3/16/04</u>
Your Name <u>M. Lewis</u>	Examiner # _____	
AU <u>2822</u>	Phone <u>279-1838</u>	Room <u>SA30</u>
In what format would you like your results? Paper is the default.		<input checked="" type="radio"/> PAPER <input type="radio"/> DISK <input type="radio"/> EMAIL

If submitting more than one search, please prioritize in order of need.

*Need before  
1423*

The EIC searcher normally will contact you before beginning a prior art search. If you would like to sit with a searcher for an interactive search, please notify one of the searchers.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB

Other: \_\_\_\_\_

What relevant art have you found so far? Please attach pertinent citations or Information Disclosure Statements. \_\_\_\_\_

What types of references would you like? Please checkmark:

Primary Refs  Nonpatent Literature \_\_\_\_\_ Other \_\_\_\_\_  
 Secondary Refs  Foreign Patents \_\_\_\_\_  
 Teaching Refs \_\_\_\_\_

What is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

*Claims 1-14**Problem: See paragraph 4  
Solution: " " 16**Heck Dissolution**2005/0035457**5905289**6995697*

SEARCHER INFO	TYPE OF SEARCH	VENDOR
Searcher: <u>Michael Lewis</u>	Structure (#) _____	STN <input checked="" type="checkbox"/>
Searcher's Office: <u>571-272-3400</u>	Bibliographic <input checked="" type="checkbox"/>	Dialog <input checked="" type="checkbox"/>
Searcher Location: STIC-EIC2800, JEF-4B68	Litigation _____	Questel/Orbit _____
Date Searcher Picked Up: <u>12/23/05</u>	Fulltext _____	Lexis-Nexis _____
Date Completed: <u>12/23/05</u>	Patent Family _____	WWW/Internet _____
Searcher Prep/Rev Time: <u>214</u>	Other _____	Other _____
Online Time: <u>77</u>		

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[File 342] Derwent Patents Citation Indx 1978-05/200580

s pn=us 5905289

S1 1 S PN=US 5905289

map pn/ct=

SearchSave "SC229" stored  
1 Select Statement, 1 Search Term(s)  
SearchSave SC229

1 SearchSave(s), 1 Search Term(s)

map pn

SearchSave "SC230" stored  
1 Select Statement, 9 Search Term(s)  
SearchSave SC230

1 SearchSave(s), 9 Search Term(s)

[File 344] Chinese Patents Abs Aug 1985-2005/May

[File 347] JAPIO Nov 1976-2005/Jul(Updated 051102)

[File 350] Derwent WPIX 1963-2005/UD,UM &UP=200582

**Set      Items      Description**

**S1                  4      PN=US 2002030224 + PN=US 2003199150 + PN=US  
2004043591 + PN=US 5766803 + PN=US 6049134 + PN=US 6404025 +  
PN=US 6696359 + PN=US 6709974 + PN=WO 9747035**

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[File 342] Derwent Patents Citation Indx 1978-05/200580

s pn=us 6225697

s1 1 S PN=US 6225697

map pn/ct=

SearchSave "SC231" stored  
1 Select Statement, 5 Search Term(s)  
SearchSave SC231

1 SearchSave(s), 5 Search Term(s)

map pn

SearchSave "SC232" stored  
3 Select Statements, 23 Search Term(s)  
SearchSave SC232

1 SearchSave(s), 23 Search Term(s)

[File 344] Chinese Patents Abs Aug 1985-2005/May

[File 347] JAPIO Nov 1976-2005/Jul(Updated 051102)

[File 350] Derwent WPIX 1963-2005/UD,UM &UP=200582

Set	Items	Description
S1	13	S1:S2 FROM 344, 347, 350
S2	13	S S1 AND PY<=2004
S3	0	S S2 AND (HEAT???? OR THERMAL?? OR TEMP OR TEMPERATURE OR ENERGY) (3N) (REDUC???? OR DISSIPAT???? OR ESCAP???? OR LOSS??? OR REMOV???? OR WITHDRAW???? OR ELIMINAT????)
S4	9	S S2 AND DUMMY

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[File 2] INSPEC 1898-2005/Dec W2  
 [File 6] NTIS 1964-2005/Dec W2  
 [File 8] Ei Compendex(R) 1970-2005/Dec W2  
 [File 34] SciSearch(R) Cited Ref Sci 1990-2005/Dec W3  
 [File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec  
 [File 35] Dissertation Abs Online 1861-2005/Nov  
 [File 65] Inside Conferences 1993-2005/Dec W3  
 [File 94] JICST-EPlus 1985-2005/Oct W3  
 [File 99] Wilson Appl. Sci & Tech Abs 1983-2005/Oct  
 [File 144] Pascal 1973-2005/Dec W2  
 [File 23] CSA Technology Research Database 1963-2005/Dec  
 [File 103] Energy SciTec 1974-2005/Nov B1  
 [File 31] World Surface Coatings Abs 1976-2005/Dec  
 [File 95] TEMA-Technology & Management 1989-2005/Nov W2  
 [File 68] Solid State & Superconductivity Abstracts 1966-2005/Dec  
 [File 60] ANTE: Abstracts in New Tech & ENGINEER 1966-2005/NOV  
 [File 293] Engineered Materials Abstracts 1966-2005/Dec  
 [File 239] Mathsci 1940-2005/Jan  
 [File 256] TecInfoSource 82-2005/Feb

**Set      Items      Description**

**S1**    4147900    S SEMICONDUCTOR? ? OR SEMI()CONDUCTOR? ? OR PCB? ? OR TAB? ? OR PRINT????()CIRCUIT()BOARD? ? OR CIRCUIT???()BOARD? ? OR LOAD()BOARD? ? OR LOADBOARD? ? OR LSI? ? OR ASIC? ? OR ELECTRON??()DEVICE? ? OR PRINT???)CIRCUIT?? OR IC? ? OR INTEGRAT????()CIRCUIT?? OR CHIP? ? OR WAFER???

**S2**    14768966    S SUBSTRATE? ? OR MATERIAL? ? OR STRATUM? ? OR SUPPORT??? OR INSULAT?? OR CERAMIC? ? OR PLASTIC????? OR GLASS??

**S3**    1030233    S (METALLURG?????? OR METALWORK???? OR METAL()WORK???? OR METAL????? OR MATERIAL????)(3N) (LAYER????? OR FILM???? OR COAT???? OR SHEET???? OR DEPOSIT????? OR LAMINA?????? OR OVERLAY???? OR OVERLAY???? OR STACK????? OR MULTILAYER????? OR PLURALIT??????)

**S4**    148167    S (CONDUCT????? OR COPPER? ? OR ALUMINUM OR ALUMINIUM)(3N) (LINE? ? OR LEAD? ? OR WIRE? ? OR WIRING OR FLEX????)

**S5**    752469    S (DUMM????? OR VIRTUAL???? OR REPLICA?????? OR DUPLICATE???? OR MODEL????? OR COPI? ? OR COPY????? OR SUBSTITUT????? OR CLON????? OR FACSIMILE? ? OR REPRO????????? OR ACTUAL????? OR REAL OR ORIGINAL?????)(3N) (STRUCTURE? ? OR RECTANG???? OR POLYGON???? OR CUBE? ? OR CUBIC????? OR SPHER????? OR PYRAMID????? OR CONE? ? OR CONIC????? OR SQUAR????? OR ORTHOGONAL????? OR METAL????? OR CONDUCT????? OR (REGULAR??? OR IRREGULAR???)()SHAPE???)

**S6**    214411    S (DIELECTRIC OR INSULAT????? OR NONCONDUCT????? OR NON()CONDUCT?????)(3N) (LAYER????? OR FILM????? OR COAT????? OR SHEET????? OR DEPOSIT????? OR LAMINA??????? OR OVERLAY????? OR OVERLAY????? OR STACK????? OR MULTILAYER????? OR PLURALIT???????)

**S8**    458029    S (HEAT????? OR THERM????? OR TEMP OR TEMPERATURE? ?)(3N) (REDUC????? OR DISSIPAT????? OR ESCAP????? OR LOSS??? OR REMOV???? OR WITHDRAW???? OR ELIMINATE????? OR RELEASE?????)

**S11**    784137    S (DIFFEREN????? OR DISSIMILAR????? OR CLASH????? OR CONTRAST????? OR MISMATCH????? OR DISTINCT????? OR SEPARAT?????)(3N) (MATERIAL????? OR COMPOSITION? ? OR COMPONENT? ? OR CONSTITUENT? ? OR ELEMENT? ? OR MATTER? ? OR SUBSTANCE? ? OR STRUCTURE? ?)

<b>S12</b>	27	S S1 AND S2 AND S3 AND S4 AND S5
<b>S13</b>	2	S S12 AND S8
<b>S14</b>	0	S S1 AND S8 AND S5 AND S11 AND S4
<b>S15</b>	732	S S1 AND S8 AND S5
<b>S16</b>	36	S S15 AND S3
<b>S17</b>	2	S S16 AND S7
<b>S18</b>	925	S S1 AND S8 AND S7
<b>S19</b>	18	S S18 AND S5

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S20	0	S S19 AND S6
S21	0	S S19 AND S4
S22	13	S S19 AND S2
S23	12	S S22 AND PY<=2004
S24	9	RD (unique items)
S25	2256	S S1 AND S8 AND S3
S26	35	S S25 AND S4
S27	26	RD (unique items)
S28	5	S S27 AND S6
S29	4	S S28 AND PY<=2004
S30	2	S S17 NOT S13
S31	8	S S24 NOT (S13 OR S17)
S32	4	S S29 NOT (S13 OR S17 OR S24)

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12/23/2005 5:03:12 PM

[File 344] Chinese Patents Abs Aug 1985-2005/May

[File 347] JAPIO Nov 1976-2005/Jul(Updated 051102)

[File 350] Derwent WPIX 1963-2005/UD,UM &UP=200582

[File 371] French Patents 1961-2002/BOPI 200209

**Set      Items      Description**

S1      2038652      S SEMICONDUCTOR? ? OR SEMI()CONDUCTOR? ? OR PCB? ? OR TAB? ? OR PRINT????()CIRCUIT()BOARD? ? OR CIRCUIT???()BOARD? ? OR LOAD()BOARD? ? OR LOADBOARD? ? OR LSI? ? OR ASIC? ? OR ELECTRON???()DEVICE? ? OR PRINT???()CIRCUIT??? OR IC? ? OR INTEGRAT????()CIRCUIT??? OR CHIP? ? OR WAFER???

S2      6638683      S SUBSTRATE? ? OR MATERIAL? ? OR STRATUM OR SUPPORT OR INSULATOR OR CERAMIC OR PLASTIC OR GLASS??

S3      1046866      S (METALLURG?????? OR METALWORK???? OR METAL()WORK???? OR METAL????? OR MATERIAL????)(3N) (LAYER????? OR FILM???? OR COAT???? OR SHEET???? OR DEPOSIT????? OR LAMINA?????? OR OVERLAY???? OR OVERLAY????? OR STACK????? OR MULTILAYER????? OR PLURALIT?????)

S4      123398      S (CONDUCT????? OR COPPER? ? OR ALUMINUM OR ALUMINIUM)(3N) (LINE? ? OR LEAD? ? OR WIRE? ? OR WIRING OR FLEX????)

S5      34342      S (DUMM????? OR VIRTUAL????? OR REPLICA?????? OR DUPLICATE????? OR MODEL????? OR COPI??? OR COPY????? OR SUBSTITUT????? OR CLON????? OR FACSIMILE? ? OR REPRO?????? OR ACTUAL????? OR REAL OR ORIGINAL????)(3N) (STRUCTURE? ? OR RECTANG????? OR POLYGON????? OR CUBE? ? OR CUBIC????? OR SPHER????? OR PYRAMID????? OR CONE? ? OR CONIC????? OR SQUAR????? OR ORTHOGONAL????? OR METAL????? OR CONDUCT????? OR (REGULAR??? OR IRREGULAR???)()SHAPE???

S6      435502      S (DIELECTRIC OR INSULAT????? OR NONCONDUCT????? OR NON()CONDUCT???????(3N) (LAYER????? OR FILM????? OR COAT????? OR SHEET????? OR DEPOSIT????? OR LAMINA?????? OR OVERLAY????? OR OVERLAY????? OR STACK????? OR MULTILAYER????? OR PLURALIT?????)

S7      241014      S (DIFFEREN????? OR DISSIMILAR????? OR CLASH????? OR CONTRAST????? OR MISMATCH????? OR DISTINCT????? OR SEPARAT?????)(3N) (MATERIAL????? OR COMPOSITION? ? OR COMPONENT? ? OR CONSTITUENT? ? OR ELEMENT? ? OR MATTER? ? OR SUBSTANCE? ? OR STRUCTURE? ?)

S8      279872      S (HEAT????? OR THERM????? OR TEMP OR TEMPERATURE? ?)(3N) (REDUC????? OR DISSIPAT????? OR ESCAP????? OR LOSS??? OR REMOV????? OR WITHDRAW????? OR ELIMINATE????? OR RELEASE?????)

S9      18328      S IC=(H01L-021/44 OR H01L-023/52)  
S10     15534      S MC=(U11-D01C6 OR U11-D03B OR U13-D02)  
S11     1      S S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7 AND S8  
S12     26      S S1 AND S3 AND S5 AND S8  
S13     2      S S12 AND S7  
S14     13      S S12 AND S6  
S15     13      S S14 AND S3  
S16     3      S S15 AND S9  
S17     1      S S15 AND S10  
S18     778      S S1 AND S7 AND S8  
S19     3      S S18 AND S5  
S20     240      S S1 AND S2 AND S3 AND S4 AND S8  
S21     29      S S20 AND S9  
S22     23      S S21 AND PY<=2004  
S23     23      IDPAT (sorted in duplicate/non-duplicate order)  
S24     23      IDPAT (primary/non-duplicate records only)  
S25     2      S S18 AND S9 AND S10  
S26     1      S S13 NOT S11  
S27     2      S S16 NOT (S11 OR S13)  
S28     0      S S17 NOT (S11 OR S13 OR S16)  
S29     1      S S19 NOT (S11 OR S13 OR S16 OR S17)  
S30     1      S S25 NOT (S11 OR S13 OR S16 OR S17 OR S19)  
S31     23      S S24 NOT (S11 OR S13 OR S16 OR S17 OR S19 OR S25)

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(FILE 'HOME' ENTERED AT 11:05:04 ON 27 DEC 2005)

FILE 'STNGUIDE' ENTERED AT 11:05:16 ON 27 DEC 2005

FILE 'CAPLUS' ENTERED AT 11:08:43 ON 27 DEC 2005

L1 710119 SEA ABB=ON PLU=ON SEMICONDUCTOR OR SEMI CONDUCTOR OR IC OR  
INTEGRATED CIRCUIT OR LSI OR CHIP OR WAFER####  
L2 2376 SEA ABB=ON PLU=ON L1 AND DUMM####  
L3 14 SEA ABB=ON PLU=ON L2 AND ((DIFFEREN#### OR DISSIMILAR OR  
DISTINCT####)(3A)(MATERIAL OR COMPOSITION## OR COMPONENT OR  
ELEMENT OR MATTER OR SUBSTANCE))  
L4 0 SEA ABB=ON PLU=ON L3 AND (HEAT##### OR THERM##### OR  
TEMP#####)(3A)(REMOV##### OR DISSIPAT##### OR ELIMINAT##### OR  
REDUC##### OR LOSS##### OR ESCAP##### OR WITHDRAW##### OR  
RELEASES#####)  
L5 10246 SEA ABB=ON PLU=ON L1 AND (HEAT##### OR THERM##### OR  
TEMP#####)(3A)(REMOV##### OR DISSIPAT##### OR ELIMINAT##### OR  
REDUC##### OR LOSS##### OR ESCAP##### OR WITHDRAW##### OR  
RELEASES#####)  
L6 43 SEA ABB=ON PLU=ON L5 AND DUMM####  
L7 0 SEA ABB=ON PLU=ON L6 AND ((DIFFEREN#### OR DISSIMILAR OR  
DISTINCT####)(3A)(MATERIAL OR COMPOSITION## OR COMPONENT OR  
ELEMENT OR MATTER OR SUBSTANCE))  
L8 1 SEA ABB=ON PLU=ON L6 AND METALLURG#####  
L9 21 SEA ABB=ON PLU=ON L6 AND (LAYER### OR MULTILAYER### OR  
MULTI LAYER###)  
L10 8 SEA ABB=ON PLU=ON L9 AND (COPPER OR CU OR ALUMINIUM OR  
ALUMINUM OR AL)  
L11 4 SEA ABB=ON PLU=ON L10 AND DIELECTRIC##  
DIS L10 1-8 IBIB ABS

FILE 'STNGUIDE' ENTERED AT 11:24:13 ON 27 DEC 2005

----- 12/27/2005 10/801,475

FILE 'HCAPLUS, WPIX, INSPEC, JICST-EPLUS, JAPIO' ENTERED AT 12:50:11 ON  
27 DEC 2005

L1 45869 SEA ABB=ON PLU=ON (DISSIMILAR OR TWO OR DIFFERENT) (W) (MATERIAL  
LS OR METALS)  
L2 392291 SEA ABB=ON PLU=ON HEATSINK#### OR HEATSPREAD#### OR (HEAT##  
OR THERMAL##) (1A) (SINK#### OR SPREAD#### OR DISSIPAT#### OR  
REMOV#### OR CONDUCT####)  
L3 1187 SEA ABB=ON PLU=ON L1 AND L2  
L4 121 SEA ABB=ON PLU=ON L3 AND H01L/IC  
L5 121 SEA ABB=ON PLU=ON L3 AND H01L?/IC  
L6 23 SEA ABB=ON PLU=ON L3 AND (SEMICOND##### OR SI OR SILICON) (2A)  
SUBSTRATE  
L7 0 SEA ABB=ON PLU=ON L3 AND DUMM####  
L8 45 SEA ABB=ON PLU=ON L3 AND STRUCTURES  
L9 64 SEA ABB=ON PLU=ON L3 AND (LINES OR VIAS OR CONDUCTORS)  
L10 61 SEA ABB=ON PLU=ON L3 AND METALLURG?  
L11 425 SEA ABB=ON PLU=ON L3 AND (CU OR COPPER OR AL OR ALUMINUM OR  
ALUMINIUM OR AL/CHI OR ALUMINUM/CN OR COPPER/CN)  
L12 134 SEA ABB=ON PLU=ON (L5 OR L6)  
L13 75 SEA ABB=ON PLU=ON L12 AND (L8 OR L9 OR L10 OR L11)  
L14 5 SEA ABB=ON PLU=ON L13 AND (THERMAL## (3A) (CONTACT#### OR  
INTERCONNECT#### OR CONNECT####))  
D TI 1-5  
D MAX 1-4  
D ALL 5  
L15 261 SEA ABB=ON PLU=ON L3 AND (CU OR COPPER OR COPPER/CN)  
L16 283 SEA ABB=ON PLU=ON L3 AND (AL OR ALUMINUM OR ALUMINIUM OR  
AL/CHI OR ALUMINUM/CN)  
L17 119 SEA ABB=ON PLU=ON L15 AND L16  
L18 117 SEA ABB=ON PLU=ON L17 NOT L14  
L19 117 SEA ABB=ON PLU=ON (L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10  
OR L11 OR L12 OR L13) AND L18  
L20 37 SEA ABB=ON PLU=ON (L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10)  
AND L18  
L21 8 SEA ABB=ON PLU=ON L20 AND (?LAYERS OR FILMS OR ?LAYERED)  
L22 13 SEA ABB=ON PLU=ON L20 AND (STRUCTURES OR MULTIL? OR MULTI OR  
MULTIPLE OR LAMINA#### OR STACK? OR SANDWICH? OR LAYERS OR  
FILMS OR LAYERED)  
L23 13 SEA ABB=ON PLU=ON L21 OR L22